



Dart Aerospace Ltd.  
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Canada

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**RBA8100-80902-304**

**Job Sheet 193912**



**Part No:** RBA8100-80902-304

**Job Qty:** 2 pcs

**Part Name:** Wrench



**Part Weight:** 0 lbs

**Status:** New

**Priority:** Medium

**Job Created:** 4/24/19

**Job Tracking No:**

**Due Date:** 6/24/19

**Created By:** Marie Lajeunesse

**Type:** SOLD

**Description:**

**Note:** DWG RBA8100-80902 Rev 4 IPP Rev. A 19.04.16 New issue DP Verify DD

**Ship Via:**

### Bill of Materials

### Job Routing

| Op No | Operation    | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off  |
|-------|--------------|-------|------------|----------|-----------|---------|-----------------------|-----------|-----------|
|       |              |       |            |          | Setup Hrs | Run Hrs | Workcenter / Supplier | Lead Time |           |
| 100   | SL-2500Y - 1 | 2 pcs | 6/24/19    | 6/24/19  | 0.00      | 2.00    | SL-2500Y - 1          |           | SL 18-6-6 |
| 110   | QC 2         | 2 pcs | 6/24/19    | 6/24/19  | 0.00      | 0.00    | QC 2 - 1              |           |           |
|       |              |       |            |          |           |         | QC 2 - 12             |           |           |
|       |              |       |            |          |           |         | QC 2 - 14             |           |           |
|       |              |       |            |          |           |         | QC 2 - 17             |           |           |
|       |              |       |            |          |           |         | QC 2 - 19             |           |           |
|       |              |       |            |          |           |         | QC 2 - 2              |           |           |
|       |              |       |            |          |           |         | QC 2 - 20             |           |           |
|       |              |       |            |          |           |         | QC 2 - 22             |           |           |
|       |              |       |            |          |           |         | QC 2 - 23             |           |           |
|       |              |       |            |          |           |         | QC 2 - 25             |           | ↓         |
|       |              |       |            |          |           |         | QC 2 - 32             |           |           |
|       |              |       |            |          |           |         | QC 2 - 33             |           |           |
|       |              |       |            |          |           |         | QC 2 - 35             |           |           |
|       |              |       |            |          |           |         | QC 2 - 39             |           |           |
|       |              |       |            |          |           |         | QC 2 - 4              |           |           |
|       |              |       |            |          |           |         | QC 2 - 40             |           |           |
|       |              |       |            |          |           |         | QC 2 - 44             |           |           |
|       |              |       |            |          |           |         | QC 2 - 45             |           |           |
|       |              |       |            |          |           |         | QC 2 - 48             |           |           |
|       |              |       |            |          |           |         | QC 2 - 49             |           |           |
|       |              |       |            |          |           |         | QC 2 - 50             |           |           |
|       |              |       |            |          |           |         | QC 2 - 51             |           |           |
|       |              |       |            |          |           |         | QC 2 - 52             |           |           |
|       |              |       |            |          |           |         | QC 2 - 57             |           |           |
|       |              |       |            |          |           |         | QC 2 - 62             |           |           |
|       |              |       |            |          |           |         | QC 2 - 63             |           |           |
|       |              |       |            |          |           |         | QC 2 - 8              |           |           |
|       |              |       |            |          |           |         | QC 2 - 66             |           |           |
|       |              |       |            |          |           |         | QC 2 - 64             |           |           |
|       |              |       |            |          |           |         | QC 2 - 65             |           |           |

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Container No: S188447



Part: RBA8100-80902-304

Job No: 193912

Serial No/Batch: S188447

Revision: 4

Inspector:

Exp Date:

Instructions:

Date: 06/06/19

|     |                             |       |         |           |                        |              |
|-----|-----------------------------|-------|---------|-----------|------------------------|--------------|
| 120 | QC 8                        | 2 pcs | 6/24/19 | 0.00 0.00 | QC 2 - 5               |              |
|     |                             |       |         |           | QC 2 - 71              |              |
|     |                             |       |         |           | QC 8 - 12              |              |
|     |                             |       |         |           | QC 8 - 14              |              |
|     |                             |       |         |           | QC 8 - 17              |              |
|     |                             |       |         |           | QC 8 - 20              |              |
|     |                             |       |         |           | QC 8 - 25              |              |
|     |                             |       |         |           | QC 8 - 3               |              |
|     |                             |       |         |           | QC 8 - 32              |              |
|     |                             |       |         |           | QC 8 - 33              |              |
|     |                             |       |         |           | QC 8 - 35              |              |
|     |                             |       |         |           | QC 8 - 39              |              |
|     |                             |       |         |           | QC 8 - 4               |              |
|     |                             |       |         |           | QC 8 - 44              |              |
|     |                             |       |         |           | QC 8 - 45              |              |
|     |                             |       |         |           | QC 8 - 49              |              |
|     |                             |       |         |           | QC 8 - 58              |              |
|     |                             |       |         |           | QC 8 - 8               | B.e 19-06-07 |
|     |                             |       |         |           | QC 8 - 9               |              |
|     |                             |       |         |           | QC 8 - 68              |              |
|     |                             |       |         |           | QC 8 - 67              |              |
|     |                             |       |         |           | QC 8 - 1 (A)           |              |
|     |                             |       |         |           | QC 8 - 47              |              |
|     |                             |       |         |           | QC 8 - 40              |              |
|     |                             |       |         |           | QC 8 - 52              |              |
|     |                             |       |         |           | QC 8 - 23              |              |
| 130 | Packaging 3-1 - Stock - B4B | 2 pcs | 6/24/19 | 0.00 0.00 | Packaging 3 - 1 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 2 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 3 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 4 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 5 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 6 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 7 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 8 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 9 - B4B  |              |
|     |                             |       |         |           | Packaging 3 - 10 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 11 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 12 - B4B | B.e          |
|     |                             |       |         |           | Packaging 3 - 13 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 14 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 15 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 16 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 17 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 18 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 19 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 20 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 21 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 22 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 23 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 24 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 25 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 26 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 27 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 28 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 29 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 30 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 31 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 32 - B4B |              |
|     |                             |       |         |           | Packaging 3 - 33 - B4B |              |

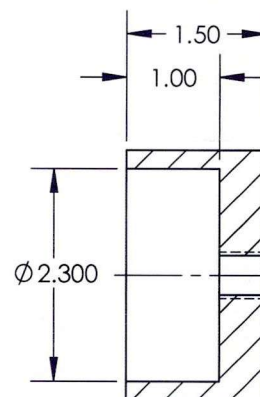
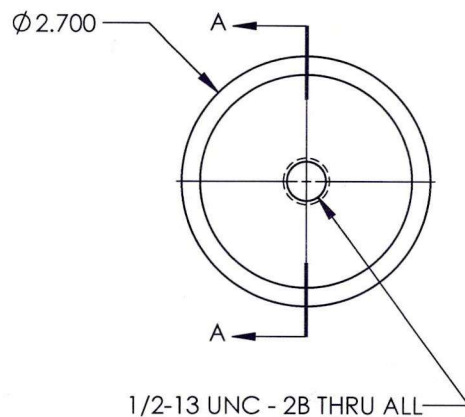
|                                                                                                                                                                                                                 |                       |                    |                  |                        |                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------|------------------|------------------------|----------------------------------|
|                                                                                                                                                                                                                 |                       |                    |                  | Packaging 3 - 34 - B4B |                                  |
|                                                                                                                                                                                                                 |                       |                    |                  | Packaging 3 - 35 - B4B |                                  |
|                                                                                                                                                                                                                 |                       |                    |                  | Packaging 3 - 36 - B4B |                                  |
| 140 QC 21 - SA                                                                                                                                                                                                  | 2 pcs                 | 6/24/19            | 0.00 0.00        | QC 21 - SA - 21        | DAS<br>21<br>9-85<br>JUN 17 2019 |
|                                                                                                                                                                                                                 |                       |                    |                  | QC 21 - SA - 70        |                                  |
|                                                                                                                                                                                                                 |                       |                    |                  | QC 21 - SA - 53        |                                  |
| Part Op 100 - 1-Machine as per folio FC <u>769</u> FOLIO REV: <u>AA</u> DWG REV: <u>4</u> 2-Debur<br>Descriptions: 120 - Engrave RBA8100-80902-300 using MARKTRONIC engraver as per DWG. <u>B.A.</u><br>130 - . |                       |                    |                  |                        |                                  |
| <b>Job BOM</b>                                                                                                                                                                                                  |                       |                    |                  |                        |                                  |
| <b>Part / Item</b>                                                                                                                                                                                              | <b>Component Name</b> | <b>Quantity</b>    | <b>Operation</b> | <b>Container</b>       |                                  |
| M1018R2.750                                                                                                                                                                                                     | M1018R2.750           | .2700 ft (.135 ea) | 100-SL-2500Y - 1 | <u>5098041</u>         |                                  |
| <b>Job Allocations</b>                                                                                                                                                                                          |                       |                    |                  |                        |                                  |
| <b>Operation</b>                                                                                                                                                                                                | <b>Component Part</b> | <b>Required</b>    | <b>Inventory</b> | <b>Allocated</b>       |                                  |
| 100-SL-2500Y - 1                                                                                                                                                                                                | M1018R2.750           | 0                  | 6                | 0                      |                                  |
| <b>Part Specifications</b>                                                                                                                                                                                      |                       |                    |                  |                        |                                  |
| Specifications could not be found.                                                                                                                                                                              |                       |                    |                  |                        |                                  |

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| REVISIONS |     |                                  |           |          |
|-----------|-----|----------------------------------|-----------|----------|
| REV       | ECR | DESCRIPTION                      | DATE      | INITIAL  |
| 3         |     | ADDED -304 ENGRAVE NOTE PER E.B. | 5/25/2012 | RJC      |
|           |     |                                  |           | APPROVED |
|           |     |                                  |           | EB       |



SHOP COPY  
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SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 193912 M.C.S.

190424

ENGRAVE T/N "RBA8100-80902",  
P/N "-300", S/N, "MADE IN USA"

NOTE:  
THIS PART REPLACES THE ORIGINAL -304  
& ELIMINATES -303 DOWEL PINS.

(-304)  
CUP

|                                                        |                          |
|--------------------------------------------------------|--------------------------|
| <b>DART<br/>AEROSPACE</b>                              |                          |
| TITLE<br><b>WRENCH - FUEL CELL ASSY</b>                |                          |
| DWG NO.<br><b>RBA8100-80902-304</b>                    | REV<br><b>4</b>          |
| MAT'L 1018/1020                                        | DRAWN BY: <b>COLE</b>    |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES | APPROVED <b>D Weil</b>   |
| .XXX ± .005 FRACTIONS ± 1/8                            | HEAT TREAT               |
| .XX ± .01 ANGLES ± 5°                                  | FINISH SEE -300 WELDMENT |
| .X ± .1                                                | SPEC                     |
| 1. BREAK ALL SHARP EDGES .015 x 45°<br>OR .015R        | USED ON MODEL            |
| 2. DIMENSIONAL LIMITS APPLY AFTER<br>PLATING           | MD                       |
| SCALE 1:2                                              | DATE 7/30/2004           |
| SHEET 9 OF 9                                           |                          |

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|
| Job: _____<br><br>Part No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/> | <b>DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Water Jet <input type="checkbox"/><br/>           Supplier Quality <input type="checkbox"/> </div> </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |                        |  |
| Date :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Sequence #:                                                                                                                       | QTY Affected :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  | MRB (QSI042)           |  |
| Description Work Order Deviation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                   | Disposition                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |  | Completed By           |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | Lead hand / Supervisor |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  | QC / QA Coordinator    |  |
| <b>Root Cause</b><br><br><div style="display: flex; flex-direction: column; align-items: flex-start;"> <div>Operator <input type="checkbox"/></div> <div>Manufacturing Process <input type="checkbox"/></div> <div>Equip/Tooling <input type="checkbox"/></div> <div>Handling/Presservation <input type="checkbox"/></div> <div>Material <input type="checkbox"/></div> <div>Product Improvement <input type="checkbox"/></div> <div>Process Improvement <input type="checkbox"/></div> <div>Human Factors <input type="checkbox"/></div> </div> |                                                                                                                                   | <b>FAULT CATEGORY</b><br><br><div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"> <input type="checkbox"/> Pressure/Forced<br/> <input type="checkbox"/> Bending<br/> <input type="checkbox"/> Crushing<br/> <input type="checkbox"/> Cracks<br/> <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist<br/> <input type="checkbox"/> Marks/Chatter<br/> <input type="checkbox"/> Mislabeled         </div> <div style="width: 50%;"> <input type="checkbox"/> Contamination<br/> <input type="checkbox"/> Misaligned/off center<br/> <input type="checkbox"/> BOM/Route<br/> <input type="checkbox"/> Broken/Damage/Defect<br/> <input type="checkbox"/> Incomplete/Unclear Instructions<br/> <input type="checkbox"/> Drill Holes<br/> <input type="checkbox"/> Fit/Function         </div> <div style="width: 50%;"> <input type="checkbox"/> Power Loss/Surge<br/> <input type="checkbox"/> Folio/Program<br/> <input type="checkbox"/> Grain Direction<br/> <input type="checkbox"/> Weld<br/> <input type="checkbox"/> Wrong Stock Pulled<br/> <input type="checkbox"/> Out of Sequence<br/> <input type="checkbox"/> Off-set/Set-up         </div> <div style="width: 50%;"> <input type="checkbox"/> Positioned Wrong<br/> <input type="checkbox"/> Outside Tolerance<br/> <input type="checkbox"/> Drawing<br/> <input type="checkbox"/> Finish<br/> <input type="checkbox"/> Part Lost/Missing<br/> <input type="checkbox"/> Misread         </div> </div> |  |                        |  |
| Other/Details:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |  |                        |  |

